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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/974,521	10/09/2001	Ian Hirschsohn	NVDA/P002816	7287
26290 7590 09/06/2007 PATTERSON & SHERIDAN, L.L.P. 3040 POST OAK BOULEVARD SUITE 1500 HOUSTON, TX 77056			EXAMINER TRUONG, CAMQUY	
			ART UNIT 2195	PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

09/974,521

Applicant(s)

HIRSCHSOHN, IAN

Examiner

Camquy Truong

Art Unit

2195

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 1, 4, 6-9, and 11-12.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1, 4, 6-9, 11 and 12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 4, 6-9, and 11-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. Claims 1, 4, 6-9, and 11-12 are presented for examination.

#### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

3. Claims 7-8, 9, 11-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A. The claim language in the following claims is not clearly understood:

i. As to claims 7, 9 and 11, lines 4-5, it is not clearly understood what contains in " a map of sequences" (i.e. mapping tasks to resources or mapping resources to processors).

#### **Claim Rejections - 35 USC § 103**

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable by Hvostov et al. (U.S. Publication 2003/0039211 A1) in view of Nishimaki et al. (U.S. 6,810,433 B1).

6. As to claim 1, Hvostov teaches the invention as claimed substantially as including: in a multi-processor computing environment, a method executed by a first processor for allocating resources for use by plurality of other processors (A bandwidth allocation strategy server (CPU) communicates with the various Media Access Controller and determine the bandwidth allocated to each Optical Network Unit (ONU) in response to request of each end user (each computer or workstation, paragraph 7, lines 1-4; paragraph 24, lines 1-4), the method comprising:

Providing a script to the first processor (the BAS server accesses a recent bandwidth allocation history file for various ONU, paragraph 8, lines 1-3), the first processor being dedicated solely to parsing the script and to the allocation of resources to the plurality other processors (the BAS determine the proper allocation of bandwidth for each ONU, paragraph 9, lines 1-4; the BAS server ensure that the average bandwidth allocated to any particular ONU is fair, paragraph 8, lines 1 - 3), the script containing information related to the resources required by the other processors and when required (a bandwidth allocation history file 32 stores recent bandwidth allocations for the various ONUs so the server 26 can determine if the average bandwidths allocated for the various ONUs are fair, paragraph 19, lines 4 -12);

Parsing script to determine the resources required by the plurality of other processors (the BAS determine the proper allocation of bandwidth for each ONU, paragraph 9, lines 1-4); and

Dynamically allocating the resources as needed by the plurality of other processors (the BAS server then transmits the bandwidth allocation to the various ONUs, paragraph 9, lines 4-7, paragraph 3, lines 1-3; claim 19, lines 11-21; paragraph 31, lines 14 - 16).

7. Hvostov does not explicitly teach the resources are required in the execution sequence of an application. However, Nishimaki teaches the execution sequence of an application (a storage unit which store a range of a device allocated for each sequence program, col. 3, lines 31-34).

8. It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporation the teaching of resources are required in the execution sequence of an application as taught by Nishimaki because this allows the sequence program can be automatically performed reliably and rapidly without the necessity of the task of visually confirming the sequence program itself, and erroneous operation by the programmable controller due to checking mistakes can be evaded beforehand.

9. Claims 7- 9, and 11-12 are rejected under 35 U.S.C. 102(e) as being unpatentable by Hvostov et al. (U.S. Publication 2003/0039211 A1) in view of Flynn et al. (U.S. Patent 5,155, 854).

10. As to claims 7 and 9, Hvostov teaches:

providing a script to other dedicated processors (the BAS server accesses a recent bandwidth allocation history file for various ONU, paragraph 8, lines 1-3), the dedicated processor being dedicated solely to executing the script and the allocation of resources to one or more other processors (the BAS determine the proper allocation of bandwidth for each ONU, paragraph 9, lines 1-4; the BAS server ensure that the average bandwidth allocated to any particular ONU is fair, paragraph 8, lines 1 – 3);

parsing the script to determine resources required by the other processor base on the map (the BAS determine the proper allocation of bandwidth for each ONU, paragraph 9, lines 1-4); and

allocating the resources immediately prior to execution of each of the tasks to achieve the most efficient execution of all of the tasks (the BAS server then transmits the bandwidth allocation to the various ONUs, paragraph 9, lines 4-7, paragraph 3, lines 1-3; claim 19, lines 11-21; paragraph 31, lines 14 - 16).

11. Hvostov does not explicitly teach the script containing a map of sequences that will occur during execution of the one or more tasks. However, Flynn teaches the script containing a map of sequences that will occur during execution of the one or more tasks

Art Unit: 2195

(a table of predefined lists (sequences) correlating all possible communication commands in general and memory commands in particular that are defined as being executable by the processing system. Each command falling under any of these command categories the specific set of system resources that are essential to execution of the command are identified and a table correlating specified commands to corresponding required resources is generated, col. 13, line 52 – col. 14, line 5).

12. It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of script containing a map of sequences that will occur during execution of the one or more tasks as taught by Flynn because this would make efficient utilization of system resources available at any given time.

13. As to claim 11, it is rejected for the same reason as claims 7 and 9. In addition, Hvostov teaches a script engine for running the script file (algorithm processors that perform bandwidth allocation, paragraph 20, lines 1-14).

14. As to claim 8, Hvostov teaches the script is an I/O processor script (paragraph 6, lines 1-10).

15. As to claim 12, Hvostos teaches dynamically allocating the resources at the time needed by the tasks (the BAS server then transmits the bandwidth allocation to the

various ONUs, paragraph 9, lines 4-7, paragraph 3, lines 1-3; claim 19, lines 11-21; paragraph 31, lines 14 - 16).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claims 4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hvostov et al. (U.S. Publication 2003/0039211 A1), in view of Nishimaki et al. (U.S. 6,810,433 B1), as applied to claim 1 above and further in view of Pitot (U.S. Patent 5,375,208).

17. As to claims 4 and 6, Hvostos, Nishimaki do not explicitly teach the resources are memory and matrix configuration. However, Pitot teaches the resources are memory and matrix configuration (col. 1, lines 40-45).

18. It would have been obvious to a person of ordinary skilled in the art at the time of the invention to apply the teaching of a resources are memory and matrix configuration as taught by Pitot to the invention of Hvostos, and Nishimaki because this allows dynamic allocation of memory locations as and when required so that the memory resource is optimized.



**Conclusion**


19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Camquy Truong whose telephone number is (571) 272-3773. The examiner can normally be reached on 8AM – 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on 571-272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-3756.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIP. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIP system, contact the Electronic Business Center (EBC) at 866-217-9197(toll-free).

Camquy Truong

August 17, 2007

  
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